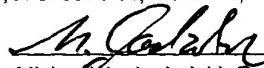


PATENT

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date set forth below as First Class Mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Date of Signature

and Deposit: 9-12-03



Michael A. Jaskolski, Reg. No. 37,551

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Mark M. Harbaugh

Client Docket No. 03AB131

Serial No.:

Filing Date: Herewith

Title: Filter With Increased First Harmonic Response and Reduced Phase Shift In A Wide Frequency Band For Encoderless Drive Applications

Art Unit:

Examiner:

Atty Docket: 110003.00031

---

**INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 CFR 1.97**

---

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The following are submitted in the above-identified application in compliance with  
37 CFR 1.97 and 1.98:

- A list of documents on form PTO-1449 together with copies of each identified document;
- A translation or a concise explanation of each non English language document is enclosed herewith.

This paper is submitted in accordance with:

- 37 CFR 1.97(b) [within 3 months of filing or prior to 1<sup>st</sup> Office Action]
- 37 CFR 1.97(c) [before Final Office Action or Notice of Allowance]; and
- The required certification made under the heading "Certification" below;  
or

- The \$\_\_\_\_\_ fee specified in 37 CFR §1.17(p) for submission of this Information Disclosure Statement is authorized under the heading "Authorization to Charge Fees" below.
- 37 CFR §1.97(d) [before issue fee payment]; and
- a) This is a petition for consideration of the subject Information Disclosure Statement. The petition fee \$\_\_\_\_\_ required by 37 CFR 1.17(i)(1) is authorized under the heading "Authorization to Charge Fees." (Direct this letter to "Attention PETITIONS EXAMINER" and if applicable include batch locator information: e.g. "Allowed Files, Batch \_\_\_\_\_, Date of Allowance \_\_\_\_\_"), and
  - b) The required Certification is stated under the heading "Certification" below.

Certification

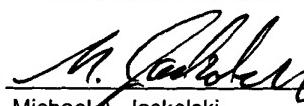
- Each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; or
- No item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this document after making reasonable inquiry, was known to any individual designated in 37 CFR 1.56(c) more than three (3) months prior to the filing of this Statement.

Authorization to Charge Fees

Please charge all applicable fees associated with the submittal of this Information Disclosure Statement to Deposit Account 17-0055.

Respectfully submitted,  
MARK M. HARBAUGH

By:

  
Michael A. Jaskolski  
Attorney for Applicant  
Reg No.: 37,551  
Quarles & Brady LLP  
411 East Wisconsin Avenue  
Milwaukee, WI 53202

**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.**

Substitute for form 1449/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>		Application Number	
		Filing Date	Herewith
		First Named Inventor	Mark M. Harbaugh
		Art Unit	
		Examiner Name	
Sheet	1	of	2
		Attorney Docket Number	110003.00031.03AB131

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

**(Use as many sheets as necessary)**

She

1

of 2

**U. S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

**Examiner  
Signature**

Date  
Considered

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.<sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<i>Complete if Known</i>	
		Application Number	
		Filing Date	Herewith
		First Named Inventor	Mark M. Harbaugh
		Art Unit	
		Examiner Name	
Sheet	2	of	2
		Attorney Docket Number	110003.00031.03AB131

OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
	1	A New Zero Frequency Flux Position Detection Approach for Direct Field Oriented Control Devices, 1999 IEEE, pp. 2290-2297, Consoli, et al.		
	2	Using Multiple Saliencies for the Estimation of Flux, Position, and Velocity in AC Machines, IEEE Trans. of Ind. Applns, vol. 34, no. 5, Sept/Oct 1998, pp 1097-1104, Denner et al		
	3	Sensorless Field Orientation Control of an Induction Machine by High Frequency Signal Injection, IEEE Ind. Applns. Soc., Annual Meeting, Oct. 1997, pp 426-432, Ha et al		
	4	Air-Gap Flux Position Estimation of Inaccessible Neutral Induction Machines by Zero Sequence Voltage, 6 pages, 6/6/2000, Consoli et al.		
	5	Sensorless Field Oriented Control Using Common Mode Currents, 2000, 8 pages, Consoli et al		
	6	US Pat. Appln. Serial No: 10/610,427 filed 06-30-2003, Flux Position Identifier Using High Frequency Injection, 10 sheets of drawings, Royak, et al		

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.